

*Specification contents and drawings as related to specified claims:*

**Summary** page 5

"... identifying those products that can be traded as financial instruments. In particular, the present invention provides *flexible* contracts based on generic root products transforming the root products into a financial instrument."

Further explanation: The key to a systematic development of products that can be traded as financial instrument is to build *exchange-traded* products around the root products. The term *flexible* is used to distinguish more commonly traded instruments from rigid form of futures which is really a benchmark.

**Sector Products**

a) Sector and In-Process Materials (IPM) pages 9-10

"In any stage of manufacturing where one state of material is transformed to another certain value is added to the original state. This *value-add* consists of material, labor, plant and equipment. In this analysis the material cost is considered the only variable element in measuring the value-add. Sector usually refers to similar or related "value-add" that belong in the same group"

Defining value-add in each stage, or level of production requires domain knowledge in that field. Block drawing 00 presents the idea. The *in-process material* refers to all value-added costs (of material) which constitute an input-output process. Taxonomy hierarchy in claim 1, 2 and 3 is based on selected product with a known value-add as exemplified in page 9.

b) Sector analysis page 11

"Taxonomy is a logical hierarchical classification showing relationship among all the categories and reduces complexity. The taxonomy of manufacturing sector for analysis leads to domain knowledge of the sector as shown..."

Further explanation: Sector products breakdown ultimately leads to root product stated in **claim 1 and 4**. It requires analyses in four (4) disciplines, namely physical product, marketing information, business intelligence and (existence) of supporting cottage industry. A physical classification is only one component of the analysis.

*Product analysis*

page 12

"The process of going from a general product to the root product involves several steps as shown in Fig.3: The first stage requires a full analysis of industry business sector with respect to its taxonomy of products as indicated by block 120. Block 110 represents a group of general, unidentified products. The next level involves development of a tree trunk for the sector, block 140. Such a trunk identifies all major products that branch out of the trunk of tree. Block 150 is another iteration of further branching to sub-sector, etc. Once all major branches are identified any targeted product can be traced to its root product".

Further explanation: In **claim 1, 5 and 6** generating sector products are noted as specific and conditional; relying on above mentioned factors. Fig 3 shows how the selected products are analyzed. See also Fig.02.

*Homogenization*

pages 13-14

"After the branches and root products are identified, the search for commonality of specification begins. Block 160 represents sorting and comparing specifications of root and branches. The task is to explore root product with common specifications to arrive at a homogenized root product."

Further explanation: The terminology refers to unifying technical specification that can, from the point of view of value-add, be identical. This is referred to as basis for generic product. The root product then refers to an underlying element at higher level of manufacturing. The

particular areas of market research are: manufacturers part number coding, technical data, specification and industry standards. **Claims 1,2 ,3,4and 5**

*Root product specification* pages 19-20

"The full specification of the root product (as generic product) is now updated and is "attached " to the root product. This is indicated as in Fig. 5, block 170. The root product is now generically specified. Some products are the key root products; also known as standard products. The remainder are known as semi-standard products based on generic root product. Any semi standard product must contain a generic root product to be defined as such. This is further explained in Section 3. Fig.5 shows how the invention utilizes the generic root product to create a semi-standard contract."

Further explanation: Fig 5 comprises a continuous updating of pricing information that were instrumental to designing generic specifications as stated in **claim 1, 13.**

## 2. Sector Market Research

*Business intelligence* pages 20-23

"Once a manufacturing sector is determined a complete list of suppliers and consumers of that sector is compiled".

Further explanation: Fig. 0112 provides the type of compiled information ranging from supplier's marketing and sale data to financial health. This is the basis of **claim 1 and 5, 6,7**

*Database engine( Table 14)*

Identification of groups and subgroups, continued to lowest level is the basis of **claims 1,8and 9, 10**

*Market intelligence*

After establishing supply side of selected product the attention shifts to market (demand) information collection. This information plus market share of products form the basis for **claims 1, 7, 8 and 11.**

*Data analysis*

Database engine now provides supply and demand figures for selected products that have already been unified for generic products. It also includes pricing of products based on 30-day delivery cycles to ensure long-term contract values. **Claim 11, 12 and 13**

**3. Financial instrument**

*Transforming a non-standard bilateral to semi standard* pages 18-19

"Starting with Fig.4 the most obvious case is that of standard product as shown in block 11 which generally bears standard specifications.... accept no change in specification and have unlimited life span.... A non standard product, appear as forward contract..... Fig.5 shows how the new invention, a semi-standard financial instrument behavior works- as a financial instrument for a given product. These flexible semi standard contracts encompass most value-added products; they are constructed based on generic root products which, in turn, act as standard products."

The basis for **claims 14 and 15** are whether the product is (generic) semi-standard; otherwise standard product. See Fig 5. In either case the product is not proprietary to any supplier. The standard (root) product constitutes a fully interchangeable product. For semi-standard products, a fully defined and therefore known value-add indicates a particular distinction and hence not fully interchangeable. In fact a major portion of financial instruments fall into this category. Such products pricing will be indexed to the standard product.